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EXAMINER

RIAD, AMINE

ART UNIT	PAPER NUMBER
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2113

DATE MAILED: 08/22/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Detailed Action

Claims 1-26 have been presented for examination.

Claims 1-26 have been rejected.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Claims 1-5, 7-17, 19-24, and 26 are rejected under 35 U.S.C. 102(a) as being anticipated by Mathur U.S. Patent 6,938,254.

In regard to claims 1, 13, and 20 Mathur discloses a method of terminating an affected application program thread (Column 4; line 37-39), comprising: receiving an indication of a hardware error associated with an application program thread (Column 4; line 56-57 prompting the user is considered an indication); determining the application program thread to be in a user operation mode (Column 4; line 57 when the user selects a currently executing application program to be terminated this is considered a user operation mode); and terminating the application program (Column 4; line 65-66).

In regard to claims 2, 14, and 21 Mathur discloses the method of claim 1, wherein the terminating the application program further comprises:

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determining the hardware error is a memory read error the memory read error being associated with the application program thread (Column 4; line 50-52 when the current memory usage or availability is compared against threshold usage or availability that it is deemed to be most critical, the system determines that the hardware error is a memory read error).

In regard to claims 3, 15, and 22 Mathur discloses the method of claim 2, further comprising: determining the memory read error is successfully contained (Column 5; line 1-2 upon terminating the application which was the source of the hardware error, Mathur successfully contains the memory read error) and (Figure 3; item 104).

In regard to claims 4, 16, and 23 Marthur discloses the method of claim 3, further comprising: receiving information of whether the memory read error is contained (Column 4; line 65-67 when the user is informed that memory is critically low, and is forced to choose which application should shut down, this is considered as an information message).

In regard to claims 5, 17, 24 Marthur discloses the method of claim 2, further comprising: receiving information of whether the hardware error occurred on a memory read (Column 4; line 62-63 this is inherent because the message "system out of

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memory dialog” during **program execution** means hardware error occurred during reading the memory).

In regard to claims 7, 19, and 26 Mathur discloses the method of claim 1, further comprising: confirming one or more registers associated with the application program thread are consumed (Column 5; line 3-5 and all resources used by the program are closed or freed this means that the register associated with the application thread is consumed).

In regard to claim 8, Mathur discloses system comprising:

a processor (Figure 2; item 40) to perform an instruction from an operating system and a memory component (Figure 2; item 42) to provide machine error information to the operating system (Figure 2; item 44);

the machine error information to include an operation mode of the affected application program, (Column 4; line 62-63 “System out of memory dialog” and Column 4; line 65 when the system informs the user that memory is critically low it informs the user that the application is in the user mode).

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the operating system to terminate the affected application program thread (Column 2; line 37-38) upon determining the affected application program to be within a user operation mode.

In regard to claim 9, Mathur discloses the system of claim 8, wherein the processor is to receive an instruction (Column 3; line 37) from the operating system to terminate the affected application program thread upon determining a memory read error has occurred (Column 4; line 37-39).

In regard to claim 10, Mathur discloses the system of claim 9, wherein the processor is to receive an instruction from the operating system to terminate (Column 2; line 37-38) the affected application program thread upon determining the memory read error is contained (Column 5; line 1-2 upon terminating the application which was the source of the hardware error, Mathur successfully contains the memory read error) and (Figure 3; item 104).

In regard to claim 11, Mathur discloses the system of claim 9, wherein the operating system is to check the machine error information message to determine whether the memory read error occurred (Column 5; line 10) and (Figure 3; Step 100) [by comparing the system is checking the machine error information].

In regard to claim 12, Mathur discloses the system of claim 11, wherein the operating system is to check the machine error information message to determine whether the memory read error is contained (Column 6; line 4-5 when the message is sent to terminate the error it means that the error has been contained).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 6, 18, and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable in view of Mathur over Gilbertson U.S. Patent 6,594,785.

In regard to claims 6, 18, and 25 Mathur discloses the limitation of parent claims 1, 13, and 20.

Mathur does not disclose receiving information of poisoned data address associated with the hardware error.

Gilbertson teaches information reception of poisoned data (abstract; "poisoning of specific memory location") address associated with the hardware error (Column 23; line 16-20). It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate information reception of poisoned data address of Gilbertson into the method, the machine, and the system of Mathur. A person of

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ordinary skill in the art would have been motivated to make this modification because Mathur discloses “ it is conceivable that other programs might find themselves without enough memory to continue. Even worse, it is possible that the operating system itself could be unable to obtain needed memory, thereby causing a system crash”. In addition Gilbertson discloses “ What is needed is a system and a method for recovering from an error within a first partition (that would have the first program for example) without affecting a second partition that shares main memory [operating system in the previous disclosure] segments with the failing partition “.

Response to Applicant's Argument

Applicant arguments filed on June 19, 2006 have been fully considered, and are not persuasive.

In regard to the argument in which the Applicant states, “Thus, according to the specification, the instructions of the operating system software are stored on machine-accessible medium. By removing the reference to carrier wave signals as indicated above, instructions stored on the machine-accessible medium are statutory. Thus, in at least one embodiment, each of the “means” elements corresponds to operating system instructions stored on machine-accessible medium to perform the functions recited by the corresponding means element. Software component are unquestionably statutory subject matter. 35 U.S.C. § 112 paragraph 6 permits claims in the form of means plus function without the specification happens to be software does not remove that means limitation from the scope of statutory subject matter. Accordingly, it is respectfully requested that the rejection of claim 20-26 be withdrawn”

Examiner points out that rejection has been withdrawn, but not for the reasons stated by the Applicant. Figure 1, according the specification shows a computer system. The software is executed in the computer system of figure 1. Examiner emphasizes that the execution of the software in the computer system performs the functions, and not the fact that it is stored on machine-accessible medium as argued by the Applicant.

In regard to the argument in which the Applicant states "Mathur does not disclose any indication of a hardware error in the above cited passage or elsewhere in the disclosure" Examiner respectfully disagrees. Mathur discloses in the summary of the invention "The invention is implemented within an operating system that continually or periodically monitors memory usage. Thresholds are established, and different actions are taken as increasingly critical memory usage thresholds are reached" Examiner considers when memory usage reaches the threshold or critical memory usage as an error, and since this error affects memory which is hardware, then Mathur discloses a hardware error. The demonstration above makes the argument invalid

In regard to the argument in which the Applicant states "Nothing in Mathur discloses the claimed determining operation, which determines whether the application program thread is in a user operation mode" Examiner respectfully disagrees, and refers Applicant to (Column 4; line 62) "Prompting the user" Examiner considers when the system prompts the user, the system has already determined that the application running is in the user mode, otherwise the system would not prompt the user instead, the system will take actions to remedy the problem without prompting the user. The above demonstration makes the argument irrelevant.

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In regard to the argument in which the Applicant states “there is no motivation to combine Mathur with Gilbertson” Examiner respectfully disagrees. Mathur and Gibertson both solve the problem of errors contained in memory, Mathur does it by setting a threshold value for memory critical usage, and Gilbertson does it by resetting memory locations of poisoned data. For somebody who is skilled in the art, it is clear that both references are combinable because both references solve memory (hardware) errors, and problems.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Contact


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Amine Riad whose telephone number is 571-272-8185. The examiner can normally be reached on 8-4:30.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Beausoliel can be reached on 571-272-3645. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AR
Amine Riad
Patent Examiner
8/11/2006


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